

ABSTRACT

A device for use in a work vehicle such as a wheel loader, capable of reliably preventing engine stall due to rapid application of high hydraulic load, without causing problems such as deterioration in fuel efficiency or vehicle performance and waste of energy. When the operator rapidly operates the loader operating lever to the raising direction while operating the steering handle, the hydraulic load in the steering hydraulic pump and the loader hydraulic pump is increased rapidly. The hydraulic load is thus shifted to a high hydraulic load line. Therefore, the engine tries to raise the torque to match the same with the high hydraulic load. However, the increase of the engine torque cannot keep up with the rapid increase of the hydraulic load (time delay occurs), resulting in that the actual speed of the engine becomes a threshold value or lower. When determining that an engine speed detected by the engine speed detecting sensor has been decreased to the threshold value or lower, the controller implements a control to reduce the absorption torque of the variable displacement hydraulic pump. The hydraulic load is thus shifted to a low hydraulic load line. The change of the hydraulic load from the high hydraulic load to the low hydraulic load gives a margin to the current torque of the engine with respect to the low hydraulic load. Consequently, the actual speed of the engine is increased to return onto the regulation line, exceeding the threshold value.